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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,836	09/15/2003	Iulian Gheorghe	02-36	1217

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EXAMINER

EDMONDSON, LYNNE RENEE

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,836

Applicant(s)

GHEORGHE, IULIAN

Examiner

Lynne Edmondson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/2/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 34-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/23/05.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Waldron et al. (USPN 6168067 B1).

Waldron teaches a method of welding Al alloy by aging before and after welding (col 3 line 36 – col 4 line 5 and col 5 lines 22-36) to a predetermined temperature for a predetermined time to induce precipitation hardening (col 6 lines 12-24), particularly to temperatures between 100 C and 300 C for a period of hours (col 6 line 61 – col 7 line 40).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-16, 19, 22-28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benedictus et al. (US 2005/0006010 A1).

Waldron teaches a method of forming members of an Al alloy of series 7xxx particularly 7050, by aging before and after welding to temperatures between 105 C (221 F) and 170 C (338 F) for 6 to 24 hours (abstract and paragraphs 1-3, 9, 37, 38) using known tempering schedules which include but are not limited to T6, T76, T73 and T74). Although it is taught that the members have good weldability (abstract, paragraph 35), there is no positive welding step.

It would have been obvious to one of ordinary skill in the art at the time of the invention to weld the members to form the aircraft or vehicular members (paragraph 2).

6. Claims 2-12 and 14-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldron et al. (USPN 6168067 B1) in view of Park (USPN 4589932).

Waldron teaches a method of welding Al alloy by aging before and after welding (col 3 line 36 – col 4 line 5 and col 5 lines 22-36) to a predetermined temperature for a predetermined time to induce precipitation hardening (col 6 lines 12-24), particularly to temperatures between 100 C and 300 C for a period of hours (col 6 line 61 – col 7 line

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40). However the time and tempering schedules are not further disclosed. Neither are the alloys further disclosed.

Park teaches aging of Al alloys in series 2xxx, 6xxx and 7xxx such as 2024, 7475, 6061 (col 9 lines 30-34) using known tempering schedules which include but are not limited to T5 and T6 which take place at typical temperatures of 220 F to 350 G for a typical period of hours (figures 2, 3, col 1 lines 25-61, col 6 lines 56-67, col 13 line 45 – col 14 line 9 and Table VII). The members are welded (col 14 lines 63-68).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use known tempering schedules to maintain the desired strength, stiffness and ductility in both the weld zone and the heat-affected region in a simple and predictable manner. Al alloys in the 2xxx, 6xxx and 7xxx series are well known, cost-effective aircraft alloys.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Langan et al. (USPN 5462712) and Fetzer et al. (USPN 3649227).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571)

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272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson
Primary Examiner
Art Unit 1725

NE
7/21/05

LRE